IN THE CLAIMS:

Please add the following claims:

31. A parallel bar linkage comprising at least four links, wherein:

each link is pivotally connected to two neighboring links;

at least two links being perimeter-links that are pivotally connected to each other, wherein each of said perimeter-links have at least three pivot points, two of said at least three pivot points being used to connect each perimeter-links to neighboring links and the remaining pivot points may be unconnected or connected to neighboring links,

each perimeter-link having three pivots points out of said at least three pivot points that are each located on a separate vertex of a triangle, whereby lines can be drawn through said three pivot points of each perimeter-link to form an isosceles triangle; and

two lines may be drawn, one line connecting the centerpoint of a side-pivot belonging to a perimeter-link to a center-pivot connecting two center-links that lie opposite the two perimeter-links, a second line connecting a side-pivot belonging to the other perimeter-link to the center-pivot, said two lines forming an angle which is constant and unchanging for any relative position of the parallel bar linkage.

32. A parallel bar linkage according to claim 31, wherein:

the isosceles triangles formed from lines drawn through said three pivot points of each perimeter-link are geometrically similar and are of different sizes from each other.

33. A parallel bar linkage according to claim 31, wherein:

the isosceles triangles formed from lines drawn through said three pivot points of each perimeter-link are geometrically similar and are the same size from each other.

34. A parallel bar linkage according to claim 31, wherein:

the isosceles triangles formed from lines drawn through said three pivot points of each perimeter-link having two sides of equal length, said two sides also being of equal length to sides of isosceles triangles formed from other perimeter links, said isosceles triangles each having bases of different length.

35. A parallel bar linkage comprising at least four links, wherein:

each link is pivotally connected to two neighboring links;

at least two links being perimeter-links that are pivotally connected to each other, wherein each of said perimeter-links have at least four pivot points,

said at least four pivots of each perimeter-link being located on vertices of two mirrored isosceles triangles, forming one quadrilateral each for said at least two perimeter-links, said quadrilaterals being similar in profile and could be dissimilar in size;

two of said at least four pivots being pivotally connected to neighboring links, said two pivots lying on the symmetry line of each quadrilateral, each link having two additional side-pivots that may be unconnected; and

a line may be drawn connecting the center-point of a side-pivot belonging to one perimeter-link to the center-point of a side-pivot belonging to the another perimeter-link, a second line may be similarly formed connecting the remaining side-pivots of each perimeter-link, said two lines forming an angle which is constant and unchanging for any relative position of the parallel bar linkage.

36. A parallel bar linkage according to Claim 35, wherein said two lines forming an angle always intersect the center-pivot which connects the two links that lie opposite the four-pivot links.

37. A reversibly expandable loop assembly comprising at least three parallel bar linkages according to Claim 31, wherein:

each parallel bar linkage is pivotally connected to two neighboring linkages by at least one side-pivot of a perimeter link,

links having side-pivots pivotally connected to each other forming a perimeter loop assembly, and

each parallel-bar linkage sharing its center-links with neighboring parallel-bar linkages to form a center-pair that is central to the loop assembly, said center-pair being rotatable around a central axis, wherein the relative rotation of the center-pair reversibly expands said loop assembly.

38. A reversibly expandable loop assembly comprising at least three parallel-bar linkages according to Claim 35, wherein:

each parallel-bar linkage is connected by at least two side-pivots to two neighboring parallel-bar linkages,

links having side-pivots pivotally connected to each other forming a perimeter loop assembly,

each linkage sharing its center-links with its neighboring linkages to form a center-pair that is central to the loop assembly, said center-pair being rotatable around a central axis, wherein the relative rotation of the center-pair reversibly expands said loop assembly.

Respectfully submitted,

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